Introduction :

Our project involves developing a comprehensive bank system application in Java, designed to handle various banking operations essential for modern financial institutions. The application includes functionalities for processing payments, managing transactions and loans, overseeing employee and branch operations, handling ATM services, managing different types of accounts, and providing client services through a main application interface. Our team of four members has collaborated, with each member taking responsibility for specific components of the system.

Kenza:

Role: contributed in the UML diagramd and assisted my team.

Contribution: was responsible for the implementation of the Payment, Transaction, and Loan classes. These classes are crucial for the financial operations of the bank. The Payment class handles the processing and validation of payments, ensuring that all transactions are securely executed. The Transaction class records all financial activities.. The Loan class manages loan applications, approvals, and interest calculations, facilitating the lending process for clients.

Doa and Sahar:

Role: Implementation of the main.

Contribution of Doa: worked on the Account, CurrentAccount, and SavingAccount classes. The Account class serves as the base class for all account-related operations, providing methods for deposits, withdrawals, and balance inquiries. The CurrentAccount class, inheriting from Account, includes additional features such as managing overdraft limits. The SavingAccount class, also inheriting from Account, focuses on interest calculations and other savings-specific operations, encouraging clients to save money efficiently.

Contribution of Sahar: developed the BankApp, Card, and Client classes. The BankApp class acts as the main interface of the application, integrating various functionalities and providing a user-friendly platform for both bank employees and clients. The Card class manages card-related operations, such as activation, deactivation, and validation of credit and debit cards. The Client class handles the management of client information, ensuring that client details are updated and accessible for personalized banking services.

Omar:

Role: Designer

Contribution: focused on the Employee, Branches, and ATM classes. The Employee class manages the information and roles of bank staff, ensuring efficient human resource operations. The Branches class oversees the operations of different bank branches, maintaining their details and managing their performance. The ATM class is responsible for the functionalities of automated teller machines, including transaction processing, balance checking, and cash dispensing, thereby enhancing customer convenience and access to banking services. Also, responsible for designing the layout of the program. This involved implementing the visual and structural aspects of the software.